

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 23

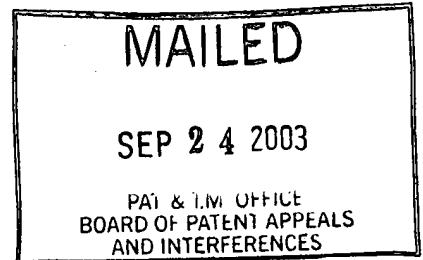
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte JEROLD S. HORN  
and  
JAMES D. HANSEN

Appeal No. 2003-1038  
Application No. 09/262,628

ON BRIEF



Before OWENS, KRATZ, and DELMENDO, Administrative Patent Judges.  
DELMENDO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 (2002) from the examiner's final rejection of claims 1 through 4, 7, 8, 10, and 12 through 23 (final Office action mailed Oct. 5, 2001, paper 11) in the above-identified application. Claims

5, 6, 9, 11, and 24 through 27, which are the only other pending claims, have been withdrawn from further consideration pursuant to 37 CFR § 1.142(b) (1959).

The subject matter on appeal relates to an orthodontic article comprising a "fluoroplastic." Further details of this appealed subject matter are recited in representative claims 1, 12, and 17 reproduced below:

1. An orthodontic article comprising a fluoroplastic, said article exhibiting at least about 0.001% transmittance at 546 nm when measured according to the Transmittance Test Procedure.<sup>(1,2)</sup>

12. A method for using an orthodontic bracket, said method comprising:

contacting a fluoroplastic orthodontic bracket having an average transmittance of at least 0.001% when measured according to the Transmittance Test Method with a composition comprising an organoborate compound; and

adhering said bracket to a tooth.

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<sup>(1)</sup> The term "fluoroplastic" is not mentioned anywhere in the specification (including the claims) as originally filed, but is explained in one of the references of record, namely Tony Whelan, Polymer Technology Dictionary 161 (Chapman & Hall, 1993), as follows:

A plastic based on polymers made from monomers containing one or more atoms of fluorine, or copolymers of such monomers with other monomers, the fluorine-containing monomer(s) being in greatest amount by mass. See, for example, fluorinated ethylene propylene copolymer and polytetrafluoroethylene.

<sup>(2)</sup> The so-called "Transmittance Test Procedure" is discussed in the specification starting at page 8, line 13.

17. An orthodontic article comprising a fluoroplastic selected from the group consisting of perfluoroethylene-propylene copolymer, perfluoroalkoxyethylene, ethylene-tetrafluoroethylene copolymer, polyvinylidene fluoride, polyvinyl fluoride, polychlorotrifluoroethylene, ethylene-chlorotrifluoroethylene copolymer, or a combination thereof.

The appellants rely on the following prior art reference:

Grootaert	5,285,002	Feb. 8, 1994
(Grootaert '002)		

In addition to Whelan, the examiner relies on the following prior art references as evidence of unpatentability:

Patel et al.	3,712,877	Jan. 23, 1973
(Patel)		
Apotheker et al.	4,035,565	Jul. 12, 1977
(Apotheker)		
Pustka	4,323,956	Apr. 6, 1982
Grootaert et al.	4,882,390	Nov. 21, 1989
(Grootaert '390)		
Hammar et al.	5,461,133	Oct. 24, 1995
(Hammar)		

Claims 1 through 4, 7, 8, 10, and 12 through 23 on appeal stand rejected under 35 U.S.C. § 112, first paragraph, as violating the written description requirement of the statute. (Examiner's answer mailed Feb. 25, 2003, paper 19, pages 4-7.)<sup>3</sup>

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<sup>3</sup> Although the statement of the rejection includes the phrase "not enabling" (answer, p. 4), the examiner provides sufficient notice that the rejection is based on lack of written description, not enablement (p. 3, ll. 1-4; pp. 4-7).

In addition, claims 1 through 4, 7, 8, 10, and 12 through 23 on appeal stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combined teachings of Hammar and Pustka. (Id. at pages 7-10.)<sup>4</sup>

We affirm the rejection under the written description requirement of 35 U.S.C. § 112, first paragraph, but reverse the rejection under 35 U.S.C. § 103(a).<sup>5</sup>

35 U.S.C. § 112, ¶1: Lack of Written Description

In reply to the Office action mailed Apr. 18, 2001 (paper 9), the appellants amended the claims by replacing the term "fluoropolymer" with "fluoroplastic." (Amendment filed Jul. 30,

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<sup>4</sup> The examiner states that all other rejections set forth in the final Office action have been withdrawn. (Answer, p. 3, ll. 1-4.)

<sup>5</sup> The appellants submit that the claims should be grouped as follows: (I) claims 1-4, 7, 8, 10, and 12-16; and (II) claims 17-23. Concerning the rejection under 35 U.S.C. § 112, ¶1, the appellants have not advanced any argument in support of the separate patentability of claims 17-23. Accordingly, for the rejection under 35 U.S.C. § 112, ¶1, we confine our discussion to claim 1. 37 CFR § 1.192(c)(7) (1995); In re McDaniel, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002) ("If the brief fails to meet either requirement [as provided under 37 CFR § 1.192(c)(7)], the Board is free to select a single claim from each group of claims subject to a common ground of rejection as representative of all claims in that group and to decide the appeal of that rejection based solely on the selected representative claim.").

2001, paper 10, appendix.) These amended claims are now on appeal.

The examiner's basic position is that the specification (including the claims), as originally filed, lacks adequate support for the invention as is now recited in the appealed claims. Specifically, the examiner finds that while the originally filed specification describes a broad genus of polymers that may encompass "fluoroplastics," it does not contain sufficient descriptive support for subject matter restricted to orthodontic articles comprising a "fluoroplastic."

The appellants, on the other hand, argue that the "Background of the Invention" as well as a particular disclosure in Grootaert '002 provide evidence that all of the fluoropolymer species described in the originally-filed specification are in fact "fluoroplastics" and that, therefore, a person having ordinary skill in the art would have appreciated upon reading the specification that the appellants, at the time of filing, had possession of the invention now claimed. (Appeal brief, pages 8-9.)

We cannot agree with the appellants on this issue.

While the appellants are correct in stating that an applicant does not have to describe exactly the subject matter claimed to satisfy the written description requirement of 35

U.S.C. § 112, first paragraph,<sup>6</sup> the disclosure of the application as originally filed must nevertheless reasonably convey to those skilled in the relevant art that the applicant, as of the filing date of the original application, had possession of the claimed invention. In re Alton, 76 F.3d 1168, 1172, 37 USPQ2d 1578, 1581 (Fed. Cir. 1996); In re Kaslow, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983).

Here, the specification is devoid of any discussion on the subgenus of "fluoroplastics" or on the "fluoroplastic" nature of the fluoropolymers described in the specification. The appellants admit as much. (Appeal brief, page 9.) Instead, the specification merely recites a potentially infinite genus in "fluoropolymers" with a listing of seven types of polymers (page 2, lines 4-11), two of which happen to be described as fluoroplastics in Grootaert '002 (column 1, lines 35-39). In our view, the disclosure of a potentially infinite genus ("fluoropolymer") and two polymers within the now claimed subgenus of polymers having a particular characteristic, i.e. "fluoroplastic," is insufficient to satisfy the written description requirement. See, e.g., In re Lukach, 442 F.2d 967,

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<sup>6</sup> See, e.g., Union Oil Co. of Cal. v. Atlantic Richfield Co., 208 F.3d 989, 997, 54 USPQ2d 1227, 1232, 1233 (Fed. Cir. 2000).

968, 169 USPQ 795, 796 (CCPA 1971) ("[W]here an applicant claims, as here, a class of compositions, he must describe that class in order to meet the description requirement of the statute.").

Nothing in the specification leads one of ordinary skill in the art to conclude that the plastic characteristic of the fluoropolymers was even a consideration to the appellants at the time the application was filed. Countless other characteristics (e.g., a range of polymer melting points based on the seven enumerated polymers) could have been selected arbitrarily, when the originally filed specification contains no hint whatsoever as to that selected characteristic. Absent the requisite blazemarks<sup>7</sup> that would have indicated to one skilled in the relevant art that the appellants had possession of the claimed articles limited to those containing "fluoroplastics," we hold that the examiner has established a prima facie case of lack of written description under 35 U.S.C. § 112, first paragraph. In re Alton, 76 F.3d at 1175-76, 37 USPQ2d at 1583-84 (citing In re Wertheim, 541 F.2d 257, 263-64, 191 USPQ 90, 97 (CCPA 1976)); see also MPEP 2163.04 (Rev. 1, Feb. 2003) ("A simple statement such as 'Applicant has not pointed out where the new (or

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<sup>7</sup> Fujikawa v. Wattanasin, 93 F.3d 1559, 1571, 39 USPQ2d 1895, 1905 (Fed. Cir. 1996).

amended) claim is supported, nor does there appear to be written description of the claim limitation '\_\_\_\_\_' in the application as filed.' may be sufficient where the claim is a new or amended claim, the support for the limitation is not readily apparent, and applicant has not pointed out where the limitation is supported." ).

As we noted above, the appellants rely on the "Background of the Invention" section in the specification for support. There, the appellants disclose that prior art orthodontic articles "recently have been formed from plastic..." (Page 1, lines 13-18.) We note, however, that the specification does not state whether these prior art orthodontic articles are based on fluoropolymers, much less whether the appellants' invention is formulated such that the plasticity of the prior art articles is retained. On this point, we further note that the specification describes the use of "plastic" additives such as polycarbonate or polyurethane. (Page 18, lines 13-15.) Thus, even if the claimed articles were presumed to be "plastic," there is no indication in the specification that it is the fluoropolymer that is responsible for this characteristic.

The appellants allege that all seven enumerated fluoropolymers are "fluoroplastic." (Appeal brief, pages 8-9.) However, except for the two polymers mentioned in Grootaert



'002, the appellants have not identified any evidence to establish that all seven of the enumerated polymers are necessarily "fluoroplastics." While the appellants offer to submit additional evidence (appeal brief, page 9, n.4), such evidence has not been made of record.<sup>8</sup> Further on this point, we observe that the copolymers recited in the specification at page 2, lines 4-11, encompass copolymers containing additional monomers such as dienes, which would render the resulting polymer elastomeric.<sup>9</sup>

The appellants contend that "fluoroelastomers" are unsuitable for use as orthodontic articles. (Appeal brief, page 8.) Presumably, the appellants are attempting to argue that the fluoropolymers described in the specification are therefore

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<sup>8</sup> It is well settled that mere lawyer's arguments and conclusory statements, which are unsupported by factual evidence, are entitled to little probative value. In re Geisler, 116 F.3d 1465, 1470, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997); In re De Blauwe, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984); In re Wood, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978); In re Lindner, 457 F.2d 506, 508-09, 173 USPQ 356, 358 (CCPA 1972).

<sup>9</sup> We do not subscribe to the appellants' argument that a "copolymer" is limited to a polymer made of only two monomers. (Appeal brief, p. 3.) Nothing in the specification compels such a restrictive view of the specification disclosure, and, in fact, such a restrictive view is contrary to accepted polymer nomenclature. Fred W. Billmeyer, Jr., Textbook of Polymer Science 101 (John Wiley & Sons 3<sup>rd</sup> ed. 1984); Hawley's Condensed Chemical Dictionary 297 (Van Nostrand Reinhold 13<sup>th</sup> ed. 1997) (copies attached).

necessarily "fluoroplastics." This argument lacks merit in view of Hammar's disclosure.

We have also considered the arguments in the reply brief filed Apr. 28, 2002 (paper 20) but do not find any of them persuasive.

Because the appellants have not adequately rebutted the examiner's prima facie case based on a lack of written description in the specification for the now claimed subject matter, we affirm.

35 U.S.C. § 103(a)

The examiner's position is that the claimed characteristics would be inherent in the references. We disagree, because inherency cannot be established by mere possibilities or probabilities. MEHL/Biophile Int'l Corp. v. Milgraum, 192 F.3d 1362, 1365, 52 USPQ2d 1303, 1305 (Fed. Cir. 1999); In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981); Hansgird v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939).

Regarding Pustka, we agree with the appellants (appeal brief, pages 6-7) analysis.

Because the examiner has not established a prima facie case of obviousness, we cannot affirm.

Summary

In summary, we affirm the examiner's rejection under the written description requirement of 35 U.S.C. § 112, first paragraph, of appealed claims 1 through 4, 7, 8, 10, and 12 through 23, but reverse the rejection under 35 U.S.C. § 103(a) of the same claims as unpatentable over the combined teachings of Hammar and Pustka.

The decision of the examiner to reject all the appealed claims is affirmed.

Appeal No. 2003-1038  
Application No. 09/262,628

No time period for taking any subsequent action in  
connection with this appeal may be extended under 37 CFR  
§ 1.136(a).

AFFIRMED

*Terry J. Owens*

Terry J. Owens )  
Administrative Patent Judge )

*Peter F. Kratz*

Peter F. Kratz )  
Administrative Patent Judge )

) BOARD OF PATENT

) APPEALS AND

) INTERFERENCES

*Romulo H. Delmendo*

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